

METHOD OF FORMING GATE STRUCTURE

Abstract

A method of forming a gate structure. First, a substrate is provided, and a gate oxide layer, a polysilicon layer, a silicide layer, and a cap layer are consecutively formed onto the substrate.

Then, an etching process is performed to etch a portion of the cap layer, the silicide layer, and the polysilicon layer and stop on the polysilicon layer for forming a stacked gate. Thereafter, a portion of the silicide layer exposed on sidewalls of the stacked gate is removed to form a recess. A passivation layer is deposited to fill the recess. The remaining polysilicon layer and the gate oxide layer outside the sidewalls of the stacked gate structure are removed.